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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,407	08/19/2005	Akira Suzuki	P08523US00/DEJ	6235
881 7590 01/24/2007 STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			EXAMINER HURLEY, SHAUN R	
			ART UNIT 3765	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/24/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/523,407	SUZUKI, AKIRA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shaun R. Hurley	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/19/05</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 11 and 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Examiner doesn't understand the use of the word "temporary". If Applicant intends "false-twisting", then it is recommended he change the title to reflect such.

3. The disclosure is objected to because of the following informalities:

Examiner has no idea how "roughness" is measured, as requirements of JIS-B0601 are unknown. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fietz (6739117).

Fietz teaches disk comprising a friction ring with rubber elasticity which is separately formed on the outer periphery of the disk body having an axis hole in the center thereof (Figures 5, 6), wherein a recessed dovetail groove (14, 15) having an opening width narrower than the inner width is formed on the outer periphery of the disk body, and a projected line fitted in the groove by using the rubber elasticity of the friction ring, wherein the ring is made of a urethane rubber having a Shore A hardness of 80-95 (Column 2, lines 55-57).

6. Claims 1, 2, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fietz (6584758).

Fietz teaches disk comprising a friction ring with rubber elasticity which is separately formed on the outer periphery of the disk body having an axis hole in the center thereof (Figures 1, 2, and 4), wherein a recessed dovetail groove having an opening width narrower than the inner width is formed on the outer periphery of the disk body, and a projected line fitted in the groove by using the rubber elasticity of the friction ring, wherein the ring is made of a urethane rubber having a Shore A hardness of 80-95 (Column 3, lines 31-40).

7. Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gotz (5423616).

Gotz teaches disk comprising a friction ring with rubber elasticity which is separately formed on the outer periphery of the disk body having an axis hole in the center thereof (Figures 3-6), wherein a recessed dovetail groove having an opening width narrower than the inner width

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is formed on the outer periphery of the disk body, and a projected line fitted in the groove by using the rubber elasticity of the friction ring.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fietz (6739117).

Fietz essentially teaches the invention as discussed above, including dovetail projections to retain the ring, but fails to specifically teach triangular or semicircular protrusions to do the same. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize such projection shapes, so as to retain the ring more securely. The ordinarily skilled artisan would understand the benefits of protrusions retaining the ring, since his dovetails do this by placing material behind an angled area which protrudes before the material, thus retaining it. The ordinarily skilled artisan with this knowledge would have known to utilize further protrusions in the dovetailed area, so as to retain the ring similarly.

10. Claims 3, 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fietz (6584758).

Fietz essentially teaches the invention as discussed above, including dovetail projections to retain the ring, but fails to specifically teach triangular or semicircular protrusions to do the same. It would have been obvious to one of ordinary skill in the art, at the time the invention

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was made, to utilize such projection shapes, so as to retain the ring more securely. The ordinarily skilled artisan would understand the benefits of protrusions retaining the ring, since his dovetails do this by placing material behind an angled area which protrudes before the material, thus retaining it. The ordinarily skilled artisan with this knowledge would have known to utilize further protrusions in the dovetailed area, so as to retain the ring similarly.

11. Claims 3, 4, 6, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotz (5423616).

Gotz essentially teaches the invention as discussed above, including dovetail projections to retain the ring, but fails to specifically teach triangular or semicircular protrusions to do the same. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize such projection shapes, so as to retain the ring more securely. The ordinarily skilled artisan would understand the benefits of protrusions retaining the ring, since his dovetails do this by placing material behind an angled area which protrudes before the material, thus retaining it. The ordinarily skilled artisan with this knowledge would have known to utilize further protrusions in the dovetailed area, so as to retain the ring similarly. In regards to polyurethane having a Shore A hardness of 80-95, such a material is well known as the ring material in textile disks, and would have been obvious to the ordinarily skilled artisan, based on the use and necessary strength of material.

***Allowable Subject Matter***

12. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Harrison et al (5749215), Braun (5692369), Schuster et al (4718226), Lorenz et al (4051655), Bock (20020112462), Fietz (6530206), Braun (6116012), Wassenhoven et al (6092357), and Bock et al (6016649) all teach what is well known in the art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R. Hurley whose telephone number is (571) 272-4986. The examiner can normally be reached on Mon - Fri, 6:30 am - 3:00 pm, off second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Shaun R Hurley  
Examiner  
Art Unit 3765

SRH  
18 January 2007